

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1 and 2 (cancelled).

Claim 3 (currently amended) A system for replacing live human ancillary medical assistance in order to prompt, alert, encourage or guide a user in relationship to utilization of medical apparatuses, said system comprising:

a medical apparatus selected from a group of medical apparatuses consisting of (1) heart rate monitoring apparatuses, (2) patient monitoring apparatuses, (3) measuring and patient performance measurement apparatuses, (4) patient therapeutic critical levels measuring apparatuses, (5) medical apparatuses having adjustable patient performance targets, (6) patient's medical performance volume measuring apparatuses, (7) medical apparatuses that provide points or ratios of a patient's performance, (8) medical verification apparatuses that confirm or refute a conclusion regarding a patient's health or performance, (9) medical apparatuses that are pre-programmed, (10) medical apparatuses that provide pronunciation of exactness towards a goal for a patient, (11) medical apparatuses that utilize an LCD display, (12) medical diagnostic apparatuses, (13) medical timing apparatuses for monitoring performance of medically related functions, (14) medical apparatuses that require timing or a timing mechanism, (15) medical heart monitoring apparatuses, (16) medical respiratory apparatuses, (17) medical apparatuses that require timed interval use, (18) oxygen tanks for medical purposes, (19) ventilators for medical purposes, (20) pulse monitoring medical apparatuses, (21) medical critical parameter measuring apparatuses, and (22) medical monitoring apparatuses; said medical apparatus having a housing and a gauge for providing and determining a measurement or result from use of said medical apparatus by a user;

a self-contained electronic assembly contained within the housing of said medical apparatus and comprising a single microcontroller unit controlled by a functional program, a timer unit and an audio storage unit, said audio storage unit storing digital data representing at least one audible verbal message for prompting or alerting and initiating use and providing understanding for the user when utilizing the medical apparatus and at least one audible verbal message for guiding the user's use of said medical apparatus; wherein the functional program instructs the single microcontroller unit regarding the operation of said electronic assembly; wherein time of day information or session time interval information programmed in said timer unit informs the microcontroller unit when to begin to automatically generate prompting or alerting, encouraging and guiding verbal audible messages for the user concerning use of said medical apparatus for a current session; ~~wherein said messages begin being automatically generated by the microcontroller unit on its own and without any outside input and prior to any use of said medical apparatus by the user for the current session;~~ said electronic assembly eliminating the need for live human ancillary medical assistance to be present with the user to provide said verbal audible messages when the user is utilizing said medical apparatus, said electronic assembly in communication with the gauge of the medical apparatus for receiving the measurement or result achieved by the user from use of the medical apparatus;

means for powering said electronic assembly; and

a speaker in communication with said electronic assembly, wherein upon direction from said microcontroller said speaker receiving a data signal from said electronic assembly representing an audible verbal message stored in said audio storage unit so that said audible verbal message is automatically generated and transmitted directly to the user to encourage compliance with the usage guidelines for said medical apparatus by the user without the necessity of having a live human ancillary medical assistant physically present with the user to provide said audible verbal message to alert or initiate use and to instruct or encourage the user.

Claim 4 (previously presented) The system of claim 3 wherein said self-contained electronic assembly further including means for verbally indicating to the user the measurement

or result achieved, caused or affected by the user in connection with said medical apparatus; wherein the measurement or result achieved is calculated through mathematical and logic calculations performed by said single microcontroller unit based on instructions received from the functional program, wherein said means for verbally indicating in communication with the gauge of said medical apparatus in order to receive the measurement or result.

Claim 5 (previously presented) The system of claim 4 wherein said means for verbally indicating having means for converting digital audio data into continuous analog signal.

Claim 6 (previously presented) The system of claim 4 wherein said means for verbally indicating comprising:

means for receiving analog signals relating to the user's performance with the medical apparatus, said means for receiving in communication with the gauge of said medical apparatus; a level setting unit providing a performance level or goal for said medical apparatus; and means for converting the receiving analog signals from said medical apparatus into digital data;

wherein said microcontroller unit is programmed to send an encouragement message from audio storage unit to the speaker based on a comparison of the analog signal received from the gauge of said medical apparatus to the performance level or goal provided by the level setting unit.

Claim 7 (previously presented) The system of claim 6 wherein said means for receiving is a gauge connector in communication with the gauge of said medical apparatus and a signal input unit of said single microcontroller unit.

Claim 8 (previously presented) The system of claim 7 wherein said level setting unit in communication with said signal input unit.

Claim 9 (previously presented) The system of claim 3 wherein said audio storage unit having a first verbal message providing a verbal prompting message to initiate use of the medical apparatus; wherein based on time information preprogrammed in the timer unit said single microcontroller unit is programmed to direct the audio storage unit to send the first verbal

message to the speaker in order to prompt the user to initiate use of said medical apparatus device.

Claim 10 (cancelled)

Claim 11 (previously presented) The system of claim 9 wherein said single microcontroller unit directs the audio storage unit at a set time of day that is programmed into the timer unit to send the first verbal message from the audio storage unit to the speaker in order to prompt the user to initiate use of said medical apparatus from the audio response relayed from a Signal Output Unit of the electronic assembly at a rate appropriate for the regeneration of an audible response from the audio data.

Claim 12 (previously presented) The system of claim 9 wherein said single microcontroller unit is programmed to continue to direct the audio storage unit to send the first verbal message or another verbal message stored in the audio storage unit to the speaker on a spaced apart continuous basis until said single microcontroller unit learns that the user has initiated performance of the required procedure with said medical apparatus.

Claim 13 (previously presented) The system of claim 9 wherein after the required procedure has been performed by the user said single microcontroller unit is programmed to wait for a predetermined time period programmed in said timer unit before automatically directing said audio storage unit to send a next initial verbal prompting message to the user for prompting the user to initiate another required procedure for a new session; wherein the user is automatically prompted and encouraged through the automatically generated verbal messages to perform multiple required procedures with said medical apparatus device being employed during a single day period as required or recommended for said medical apparatus.

Claim 14 (previously presented) The system of claim 3 wherein said self-contained electronic assembly further comprising means for verbally indicating comprising:

means for determining the measurement or result achieved, caused or affected by the user in connection with said medical apparatus, said means for determining in communication with the gauge of said medical apparatus; and

one or more verbal encouragement messages stored within said audio storage unit;

wherein the microcontroller unit is programmed to send a signal to the audio storage unit based on the measurement or result achieved by the user and the audio storage unit provides an appropriate verbal encouraging or guiding message which is sent to the speaker to verbally indicate to the user the measurement or result determined and the encouraging or guiding message.

Claim 15 (previously presented) The system of claim 14 wherein said timer unit determines when prompting audio messages are sent to the speaker by said audio response unit based on instructions contained within the functional program.

Claim 16 (previously presented) The system of claim 15 further comprising a level setting unit storing a target measurement; wherein the verbal encouraging or guiding message sent is chosen from a plurality of verbal messages stored in said audio data message storage unit; wherein at least one of the plurality of verbal encouraging or guiding messages is used where the measurement or result determined is lower than the target measurement and at least one of the plurality of verbal encouragement messages is used where the measurement or result determined is higher than the target measurement; wherein the plurality of verbal messages allow an appropriate verbal message to be selected, according to the user's measurement or result performance of the required procedure according to said medical apparatus.

Claim 17 (currently amended) A system for replacing live human ancillary medical assistance in order to prompt, encourage and guide a user relating to the use of a medical apparatus, said system comprising:

a medical apparatus selected from a group of medical apparatuses consisting of (1) heart rate monitoring apparatuses, (2) patient monitoring apparatuses, (3) measuring and patient performance measurement apparatuses, (4) patient therapeutic critical levels measuring apparatuses, (5) medical apparatuses having adjustable patient performance targets, (6) patient's medical performance volume measuring apparatuses, (7) medical apparatuses that provide points or ratios of a patient's performance, (8) medical verification apparatuses that confirm or refute a

conclusion regarding a patient's health or performance, (9) medical apparatuses that are pre-programmed, (10) medical apparatuses that provide pronunciation of exactness towards a goal for a patient, (11) medical apparatuses that utilize an LCD display, (12) medical diagnostic apparatuses, (13) medical timing apparatuses for monitoring performance of medically related functions, (14) medical apparatuses that require timing or a timing mechanism, (15) medical heart monitoring apparatuses, (16) medical respiratory apparatuses, (17) medical apparatuses that require timed interval use, (18) oxygen tanks for medical purposes, (19) ventilators for medical purposes, (20) pulse monitoring medical apparatuses, (21) medical critical parameter measuring apparatuses, and (22) medical monitoring apparatuses;

wherein said medical apparatus having a housing and a gauge for providing and determining a measurement or result from use of said medical apparatus by a user;

a self-contained means for automatically verbally prompting the user to initiate use of said medical apparatus to perform a medical procedure achieved through the use of said medical apparatus without a live human ancillary medical assistant physically instructing or encouraging the user, said means for automatically verbally prompting having a microcontroller unit which includes a timer unit; wherein based on time of day information or time interval information programmed in said timer unit the microcontroller begins to automatically generate a prompting message for the user concerning use of the medical apparatus for a current session; ~~wherein said message begins being automatically generated by the microcontroller unit on its own and without any outside input and prior to any use of said medical apparatus by the user for the current session;~~

means for automatically verbally indicating and verbally responding accordingly to the user based on the measurement or result achieved, caused or affected by the user in connection with the medical apparatus, said means for verbally indicating and verbally responding in communication with the gauge of the medical apparatus for receiving the measurement or result achieved by the user from use of the medical apparatus; and

wherein said means for automatically verbally prompting and said means for automatically verbally indicating and verbally responding are both disposed within said housing of said medical apparatus.

Claim 18 (cancelled)

Claim 19 (previously presented) The system of claim 17 wherein said means for automatically verbally indicating comprising:

means for determining a measurement or result achieved, caused or affected by the user in connection with said medical apparatus, said means for determining in communication with the gauge of said medical apparatus;

means for establishing a target measurement or result for said medical apparatus;

an audio response unit;

means for converting digital data into analog through regeneration;

a signal output unit in communication with said means for converting;

wherein audio data is successively relayed to the Signal Output unit at a rate appropriate for the regeneration of the audible response according to said medical apparatus;

means for powering said audio response unit; and

a speaker in communication with said signal output unit;

wherein the microcontroller unit is programmed to send an output signal to the audio response unit based on the measurement or result achieved by the user and the audio response unit provides a verbal message relayed from stored audio data which is sent to the speaker to verbally indicate to the user said measurement or result achieved and also sends a verbal encouragement message appropriate for the measurement or result determined based on the target measurement or result provided by said means for establishing.

Claim 20 (previously presented) The system of claim 19 wherein said audio response unit including an audio message storage unit which sends the verbal encouragement message to the speaker based on a comparison of the measurement or result achieved to the target measurement or result.

Claim 21 (previously presented) The system of claim 19 wherein the verbal encouragement message sent is chosen from a plurality of verbal messages stored in the audio message storage unit; wherein at least one of the plurality of verbal encouragement messages is used where the measurement or result determined is lower than the target measurement or result and at least one of the plurality of verbal encouragement messages is used where the measurement or result determined is higher than the target measurement or result; wherein the plurality of verbal messages allow an appropriate verbal message to be selected according to the user's measurement or result performance of the required procedure according to said medical apparatus as needed.

Claim 22 (currently amended) An automated verbal prompting and indication device for a medical apparatus selected from a group of medical apparatuses consisting of (1) heart rate monitoring apparatuses, (2) patient monitoring apparatuses, (3) measuring and patient performance measurement apparatuses, (4) patient therapeutic critical levels measuring apparatuses, (5) medical apparatuses having adjustable patient performance targets, (6) patient's medical performance volume measuring apparatuses, (7) medical apparatuses that provide points or ratios of a patient's performance, (8) medical verification apparatuses that confirm or refute a conclusion regarding a patient's health or performance, (9) medical apparatuses that are pre-programmed, (10) medical apparatuses that provide pronunciation of exactness towards a goal for a patient, (11) medical apparatuses that utilize an LCD display, (12) medical diagnostic apparatuses, (13) medical timing apparatuses for monitoring performance of medically related functions, (14) medical apparatuses that require timing or a timing mechanism, (15) medical heart monitoring apparatuses, (16) medical respiratory apparatuses, (17) medical apparatuses that require timed interval use, (18) oxygen tanks for medical purposes, (19) ventilators for medical purposes, (20) pulse monitoring medical apparatuses, (21) medical critical parameter measuring apparatuses, and (22) medical monitoring apparatuses, said automated prompting device comprising:

wherein said medical apparatus having a housing and a gauge for providing and determining a measurement or result from use of said medical apparatus by a user;

electronic means for automatically verbally prompting the user to initiate use for said medical apparatus to perform or guide a recommended procedure achieved through utilization of said medical apparatus, without having to have a live human ancillary medical assistant physically present; wherein said verbal prompting is achieved without instructions, encouragement or information about the medical apparatus from a live human ancillary medical assistant or from a remote location, said means for automatically verbally prompting having a microcontroller unit which includes a timer unit; wherein based on time of day information or session time interval information programmed in said timer unit the microcontroller unit begins to automatically generate a prompting message for the user concerning use of the medical apparatus for a current session; ~~wherein said message begins being automatically generated by the microcontroller unit on its own and without any outside input and prior to any use of said medical apparatus by the user for the current session; and~~

electronic means for automatically verbally indicating a response according to utilization of said medical apparatus based on the measurement or result being achieved, caused or affected by the user in connection with said medical apparatus and without encouragement or instructions from a live human ancillary medical assistant or from a remote location, said electronic means for automatically verbally indicating a response in communication with the gauge of the medical apparatus for receiving the measurement or result;

wherein said electronic means for automatically verbally prompting and said electronic means for automatically verbally indicating are both disposed within said housing of said medical apparatus.

Claim 23 (previously presented) The automated verbal prompting and indication device of claim 22 wherein said electronic means for automatically verbally prompting is part of a self-contained electronic assembly in communication with a speaker and means for powering said electronic assembly, said microcontroller unit having an audio storage unit, said audio storage

unit having at least one stored verbal message for prompting the user to initiate use of said medical apparatus to perform the required procedure; wherein said single microcontroller unit is programmed to automatically direct the audio storage unit to send a first verbal message to the speaker in order to prompt the user to initiate use of said medical apparatus by the user, said electronic assembly disposed within said housing.

Claim 24 (previously presented) The automated verbal prompting and indication device of claim 23 wherein after the required procedure has been performed by the user said microcontroller unit is programmed to wait for a predetermined time period programmed in the timer unit before directing said audio storage unit to send a next verbal prompting message to the user for prompting the user to initiate another required procedure; wherein the user is automatically encouraged by said electronic assembly communicating through the speaker to perform multiple required procedures with said medical apparatus during a single day period without having a live human ancillary medical assistant present or without having to receive a communication from a remote location.

Claim 25 (previously presented) The automated verbal prompting and indication device of claim 22 wherein said means for verbally indicating comprising:

means for determining a measurement or result achieved, caused or affected by the user in connection with said medical apparatus, said means for determining in communication with the gauge of said medical apparatus;

an audio response unit;

means for powering said audio response unit; and

a speaker in communication with said audio response unit;

wherein a signal corresponding to the measurement or result achieved by the user is sent by said means for determining to the audio response unit which generates a verbal message which is sent to the speaker to verbally indicate to the user said measurement or result achieved and also sends a verbal functional message appropriate for the measurement or result determined in accordance with particular guidelines for said medical apparatus;

wherein said means for determining, said audio response unit, said means for powering and said speaker are disposed within said housing.

Claim 26 (previously presented) The automated verbal prompting and indication device of claim 25 further comprising a level setting unit for providing a target measurement or result from use of the medical apparatus; wherein said audio response unit including an audio message storage unit which sends a verbal encouragement message to the speaker based on a comparison of the measurement or result achieved to the target measurement or result provided by said level setting unit; said level setting unit disposed within said housing.

Claim 27 (previously presented) The automated verbal prompting and indication device of claim 26 wherein the verbal encouragement message sent is chosen from a plurality of verbal messages stored in the audio message storage unit; wherein at least one of the plurality of verbal encouragement messages is used where the measurement or result determined is lower than the target measurement or result and at least one of the plurality of verbal encouragement messages is used where the measurement or result determined is higher than the target measurement or result; wherein the plurality of verbal messages allow an appropriate verbal message to be selected according to the user's measurement or result from performance of the required procedure according to said medical apparatus.

Claim 28 (previously presented) The automated verbal prompting and indication device of claim 22 further comprising means for storing information relating to the user usage of said medical apparatus or to measurements or results achieved by the user from use of said medical apparatus for later access or retrieval after a session with the medical apparatus has been completed.

Claim 29 (cancelled).

Claim 30 (previously presented) The automated verbal prompting and indication device of claim 28 further comprising means for transmitting the stored information to a retrieving location that is remote to whatever current location of said medical apparatus.

Claims 31-37 (cancelled).

Claim 38 (new) The system of Claim 3 wherein said message begins being generated by the microcontroller unit without any live human assistance being required to be present with the user and for an initial prompting or alerting messages also prior to any use of said medical apparatus by the user for the current session.

Claim 39 (new) The system of Claim 17 wherein said message begins being generated by the microcontroller unit without any live human assistance being required to present with the user and for an initial prompting or alerting messages also prior to any use of said medical apparatus by the user for the current session.

Claim 40 (new) The automated verbal prompting and indication device of claim 22 wherein said message begins being generated by the microcontroller unit without any live human assistance being required to be present with the user and for an initial prompting or alerting messages also prior to any use of said medical apparatus by the user for the current session.